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Reply to Office Action of September 10, 2005

Atty Dkt No. PD-990066

Remarks

Claims 1-3, 5-16 and 28 remain in the application. Claims 1-3 and 5-14 are allowed. Claims 15, 16 and 28 are resubmitted together with arguments in support of the express claim limitations that distinguish the present invention from the combined teachings of the references as discussed in greater detail below. All of the claims are now considered in condition for allowance as argued below.

The Examiner argued that the title of the invention is not descriptive and suggested that the title does not describe the invention. However, this request is not understood. The invention pertains to handling of audio signals during delivery and satellite transmission of television broadcasts as previously recited in the title. A switching logic handles multiple audio formats, so that even sound studio-like AC-3 reproduction can be distributed to customers, as well as audio tracks in preferred languages, as described in claims 15, 16 and 28. The selection of these has been made available to the user by Applicants' present invention. Claim 1 and its dependent claims handle signal reproduction without disruption (see claims 1 and 6). While the switching logic in the uplink makes both audio formats accessible, the selection between the two is performed by the user. Accordingly, "switching between AC-3 and AES-3" is not more descriptive of the invention. Applicants respectfully request reconsideration of the Examiner's requirement for a different title. The Examiner is invited to contact the Applicants' attorney in order to discuss whether other language may be considered more accurate.

The Examiner rejected independent claim 15 and its dependent claims 16 and 28 as obvious from the teachings of Hiroi in view of Chawla. However, the Examiner mischaracterizes the teachings of the references as tracking the language of the claims. Moreover, the rejection combines substantially unrelated inventions in a manner not supported by ordinary skill in the art or the references of record. The stated interpretations of the express teachings of the references, together with the absence of

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motivation provided by any of the prior art of record, fails to provide a proper ground for rejection under 35 U.S.C. ' 103.

The Examiner argued that Hiroi teaches an uplink transmitting AC-3 audio with video transmissions in a satellite broadcast system. In contrast, Hiroi expressly defines improvements to a receiver that receives and stores broadcast data, and fails to teach any improvements to provide multiple audio program selection in the uplink. The Examiner refers to Figure 1 and the Figure 1 sub-block 150Cstream combiner and states "mixing the signal to audio and video signals." These statements do not establish the existence of the claim limitations in the prior art reference. Rather, while the claim language expressly requires sensing a plurality of audio signal formats and directing the signals to a plurality of encoders, Hiroi teaches a combiner 150 that receives "video, audio and broadcast data (arriving via leads 121, 131, and 141, respectively)." There is no teaching or suggestion of multiple audio formats or a plurality of signals from the generator 130 through the lead 131. Moreover, these deficiencies are not provided by the teachings of Chawla.

The Examiner argued that Chawla 6,360,369 "teaches a content manager that discerns different audio formats via a packet identifier (PID), citing col. 9, lines 4-14 through col. 8, lines 40-42. However, no discussion of different audio formats takes place throughout Chawla. Rather, Chawla acknowledges that multiple audio streams may be provided with a single video stream to provide a different language option, but that is not the same as Applicants' teaching of the first language signal AES #1, a second language signal AES #2 and AC-3 signal of a substantially different format.

Moreover, Chawla does no sensing of these different formats. Rather, only identification of the particular language of a signal is provided by an identifier to a packet in a digital bit stream. Such identification in a packet has no pertinence to the detection by switch input logic as defined in claim 15. The uplink switch input logic discerns differing audio formats, and is not taught or suggested by the digital signal identifier bits of Chawla. At most, Chawla recognizes that similar audio streams having different language options may be used with its media server improvements that control

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the release of streams during state changes subject to control command such as "play, stop, set video PID, set audio PID, set modulator frequency and reset". (Col. 10, lines 60-61.)

The Examiner cited portions of the Chawla description throughout columns 8 and 9 that refer to how packet identifiers in a digital stream can be used and detected to maintain continuity of the stream under these controls. These excerpts do not teach or suggest that audio signals come in different signal formats. Moreover, those descriptions do not teach how different audio formats may be uplinked in a process that detects different formats. Since the use of packet identifiers to identify the language contained within an audio stream does not teach sensing a plurality of audio signal formats in a switch input logic for processing different audio formats in an uplink, claim 15 particularly and patentably defines the present invention over the combined teachings of Hiroi and Chawla references under 35 U.S.C. ' 103.

Moreover, since the Chawla invention addresses how digital data streams are controlled to provide media streams from a media file system, the reference does not teach uplink transmitting in a satellite broadcast system as required by the claim. Moreover, no sensing of audio signal formats is involved. As a result, the absence by Hiroi's failure to teach multiple audio formats is not filled by Chawla. Likewise, Hiroi's failure to detect formats by compression sensing in an uplink processor as defined in claims 16 and 28, is not fulfilled by Chawla. No application of ordinary skill in the art would motivate the skilled artisan to combine the teachings of Chawla with the teachings of Hiroi to do so. Rather, such a combination does not result in the uplink in a satellite broadcast system that has an encoder sensing a plurality of audio signal formats and redirecting the signals to a plurality of encoders based on the sensing.

Hiroi acknowledges that a broadcast data generator may be supplied from the different sources of both stored data elements and dynamically generated data elements, but there is no teaching or suggestion that multiple inputs may be provided to the audio stream generator 130 of Hiroi. Moreover, Chawla's teaching of multiple streams language for multiple audio streams does not teach or suggest the use of

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different audio signal formats, or different compression techniques for such audio signals, before encoding them for transmission through a satellite system. Rather, the complete absence of different audio signal formats in the both of the references renders the input of differently formatted audio signals a substantial departure from the teachings of these references. Rather, the express claim limitations of an encoder with switch input sensing the plurality of audio signal formats is conspicuously absent from the teachings of both of these references. As a result, their combination is not motivated by any similarity in their teachings.

Applicants' attorneys believed that the Examiner's previous misunderstandings of the relevance of Hiroi stated by the Examiner had been overcome. When the Examiner argued that the "stream combine of Hiroi shows switch logic (multiplexer) based on the signal format at col. 4, line 61 through col. 5, line 10", Applicant argued that the cited excerpt from the patent refers to video 121, audio 131 and broadcast data 141 for a channel 161, and acknowledges that numerous channels 162 and 163 may also include such data. However, there are no multiple forms of audio signal per channel. Moreover, while the Examiner previously argued that Hiroi defines a particular encoder in Hiroi column 5, lines 5-9 through column 5, lines 55-65, Applicants responded that portion of the Hiroi reference is a discussion of modulator and referred to how the signal is transported, and is not a reference as to how different formats of audio signal can be included in a system. Moreover, when the Examiner pointed to Hiroi's teaching of stored user data to access certain channels at column 5, lines 13-45, Applicants pointed out that discussion pertains to multiple sources of broadcast data from the database 143 or the generator 145, and is not a discussion of multiple audio signal format. Accordingly, the Examiner's arguments fail to establish why or how a skilled artisan would be motivated to combine the bit stream control of Chawla to Hiroi. The claim limitations are not expressly supported by any teachings of these references. The combination is not motivated by the teachings of any of these references. Moreover, the combined teachings of the references do not result in uplink transmitting multiple audio formats in a satellite broadcast system as claimed by the Applicants.

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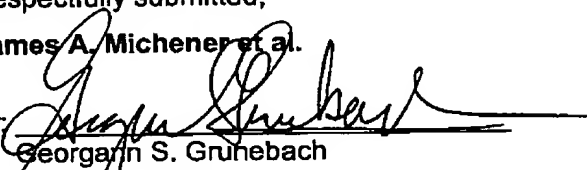
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In view of the foregoing, and the Examiner's own understanding that claims 1-3 and 5-14 are allowed, all of the claims of the present application are considered patentable over the prior art of record, and such action is respectfully requested.

Respectfully submitted,

James A. Michener et al.

By


Georgann S. Gruebach

Reg. No. 33,179

Attorney/Agent for Applicant

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The DIRECTV Group, Inc.
RE/R11/A109
2250 E. Imperial Highway
P. O. Box 956
El Segundo, CA 90245

Phone: 310-964-4615